



DATA ANALYSIS BOOTCAMP

PYTHON REVIEW

WHAT IS PYTHON?

- **Startes in the late 80's**
- **Intended to be easy to teach but also of industrial strength**
- **Open-source**
- **Top 10 most widely used Programming Language**



The name is given as a tribute to British Comedy Group Monty Python

WHY PYTHON?

WHAT ARE THE MAIN USE CASES?

- **Data Analysis & visualization**
- **Application Development**
- **Mathematics & Research**
- **System Scripting**

AND COUNTING!

PYTHON CHEAT SHEET



Comparison Operators

Operator	Name	Example
<code>==</code>	Equal	<code>x == y</code>
<code>!=</code>	Not equal	<code>x != y</code>
<code>></code>	Greater than	<code>x > y</code>
<code><</code>	Less than	<code>x < y</code>
<code>>=</code>	Greater than or equal to	<code>x >= y</code>
<code><=</code>	Less than or equal to	<code>x <= y</code>

Logical Operators

Operator	Description	Example
<code>and</code>	Returns True if both statements are true	<code>x < 5 and x < 10</code>
<code>or</code>	Returns True if one of the statements is true	<code>x < 5 or x < 4</code>
<code>not</code>	Reverse the result, returns False if the result is true	<code>not(x < 5 and x < 10)</code>

PYTHON CHEAT SHEET



Membership Operators

Operator	Description	Example
in	Returns True if a sequence with the specified value is present in the object	x in y
not in	Returns True if a sequence with the specified value is not present in the object	x not in y

Identity Operators

Operator	Description	Example
is	Returns true if both variables are the same object	x is y
is not	Returns true if both variables are not the same object	x is not y

PYTHON CHEAT SHEET

Conditional Statements

```
a = 200
b = 33
if b > a:
    print("b is greater than a")
elif a == b:
    print("a and b are equal")
else:
    print("a is greater than b")
```

if <condition> :

Write actions you want to happen

elif <another condition>:

Write actions you want to happen

else:

Write actions you want to happen

USEFUL RESOURCES

PYTHON DOCUMENTATION:

- [HTTPS://WWW.SCIPY.ORG/](https://www.scipy.org/)
- [HTTPS://DOCS.PYTHON.ORG/3/](https://docs.python.org/3/)

STACK OVERFLOW - [HTTPS://STACKOVERFLOW.COM/](https://stackoverflow.com/)

BLOGS/FORUMS

- TOWARDS DATA SCIENCE
- GEEKSFORGEEKS
- DATASCIENCE CENTRAL
- [HTTPS://WWW.YOUTUBE.COM/USER/SENTDEX](https://www.youtube.com/user/sentdex)
- [HTTPS://WWW.YOUTUBE.COM/USER/SCHAFER5](https://www.youtube.com/user/schafers5)

**ANY
QUESTIONS ?**